

REMARKS

The Specification is amended to correct terms that were not clear, concise or exact by way of the attached Substitute Specification. Support for the amendments to Claim 3 and new Claim 11 is found in the Specification as filed, for example, on pages 7-10. No new matter has been added herewith.

Obviousness

Claims 3, 5, 6, 7, 8, 9 and 10 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Kayakiri et al. (US Patent No. 6,348,474) in view of Brunetta et al. (US Patent No. 5,562,911). The Examiner states that Kayakiri et al. teaches the use of perfluorocompounds in compositions to treat nervous and/or endocrine induced cutaneous disorders and to increase the blood flow and that Brunetta et al. teaches that perfluorocompounds can be used as emulsions in cosmetic applications. Thus, the Examiner concludes that one of ordinary skill in the art would have been motivated to combine the two compositions in order to treat skin lesions with perfluorocompounds in cosmetics as emulsion.

Contrary to the Examiner's assertion, Kayakiri et al. does not disclose anything about increasing skin capillary blood flow. Instead, the disclosure provides an open-ended, miscellaneous list of disorders at column 244, line 40 to column 245, line 10 that can be treated by sulfonamide compounds including impaired glucose tolerance disorder, diabetes (e.g., type II diabetes), diabetic complications (e.g., diabetic gangrene, diabetic arthropathy, diabetic bone resorption, diabetic glomerulosclerosis, diabetic nephropathy, diabetic dermatopathy, diabetic neuropathy, diabetic cataract, diabetic retinopathy and the like), insulin resistant syndrome (e.g., insulin receptor disorders, Rabson-Mendenhall syndrome, leprechaunism, Kobberling-Dunnigan syndrome, Seip syndrome, Lawrence syndrome, Cushing syndrome, acromegaly and the like), polycystic ovary syndrome, hyperlipidemia, atherosclerosis, cardiovascular disorders (e.g., stenocardia, cardiac failure and the like), hyperglycemia (e.g., those characterized by abnormal saccharometabolism such as feeding disorders), hypertension and the like, based on their blood sugar level-depressing activity, as well as angina pectoris, hypertension, pulmonary hypertension, congestive heart failure, glomerulopathy (e.g., diabetic glomerulosclerosis), tubulointerstitial disorders (e.g., kidney diseases induced by FK506, cyclosporin and the like), renal failure, atherosclerosis, angiostenosis (e.g., after percutaneous arterioplasty), distal angiopathy, cerebral apoplexy, chronic reversible obstructions (e.g., bronchitis, asthma inclusive of chronic asthma

and allergic asthma), autoimmune diseases, allergic rhinitis, urticaria, glaucoma, diseases characterized by enteromotility (e.g., hypersensitive enteropathy), impotence (e.g., organic impotence, psychic impotence and the like), nephritis, cancer cachexia or restenosis after PTCA, pancreatitis, cachexia (e.g., progressive weight loss due to lipolysis, myolysis, anemia, edema, anorexia and the like in chronic diseases such as cancer, tuberculosis, endocrine diseases and AIDS, and the like, based on their cGMP-PDE (especially PDE-V)-inhibiting activity, smooth muscle relaxing activity, bronchodilating activity, vasodilating activity, smooth muscle cell suppressing activity and anti-allergic activity.

In some cases, the action of perfluorocompounds may be through mechanisms that do not increase blood circulation. The cited references address dermatological problems caused by endocrine disorders connected with endocrine deficiencies in the receptor systems, which support immunological and growth functions. In these cases the positive effect from application of the perfluorocompounds and other preparations to the skin may be connected with properties apart from an effect on skin capillary blood flow. For example, some perfluorocompounds may have anti-inflammatory effects or wound-healing properties. In contrast, the present inventors have investigated for the first time the action of perfluorocompounds on mechanisms of regulation of the microvasculature and on skin capillary blood flow.

The Applicants note that, unlike the cited references, the present application does not necessarily concern methods of treating dermatological problems connected with specific disorders (e.g., endocrine diseases). In contrast, the application teaches a method of using a perfluorocompound emulsion to increase skin capillary blood flow, thereby treating microcirculation loss due to abnormal regulation of the microvasculature. This type of treatment can be implemented with patients that have abnormal skin capillary blood flow, but are otherwise healthy. For example, the claimed treatment methods can be used to treat conditions caused by environmental stress on healthy organisms.

Claim 3 is amended to recite the steps of identifying a patient in need of increased skin capillary blood flow, and applying a perfluorocompound emulsion to a cutaneous surface, wherein said perfluorocompound emulsion induces an increase in skin capillary blood flow. New Claim 11 recites the steps of administering a perfluorocompound emulsion to a cutaneous surface of a patient, wherein said perfluorocompound emulsion induces an increase in skin capillary blood flow, and measuring in said patient the effect of said perfluorocompound

emulsion on skin capillary blood flow. The combination of references cited do not provide any reason to specifically address abnormal regulation of skin capillary blood flow. In particular, the references provide no reason for either identifying a patient in need of increased skin capillary blood flow or measuring in a patient the effect of a perfluorocompound emulsion on skin capillary blood flow.

In view of the amendments to the Claims and the above remarks, the Applicants respectfully request removal of the rejection under 35 U.S.C. § 103(a).

No Disclaimers or Disavowals

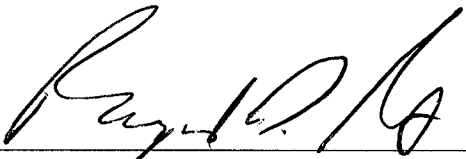
Although the present communication may include alterations to the application or claims, or characterizations of claim scope or referenced art, the Applicants are not conceding in this application that previously pending claims are not patentable over the cited references. Rather, any alterations or characterizations are being made to facilitate expeditious prosecution of this application. The Applicants reserve the right to pursue at a later date any previously pending or other broader or narrower claims that capture any subject matter supported by the present disclosure, including subject matter found to be specifically disclaimed herein or by any prior prosecution. Accordingly, reviewers of this or any parent, child or related prosecution history shall not reasonably infer that the Applicants have made any disclaimers or disavowals of any subject matter supported by the present application.

Please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. 11-1410.

Respectfully submitted,

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